

Publication

**EP 0521419 A3 19950111**

Application

**EP 92110911 A 19920627**

Priority

GB 9114354 A 19910703

Abstract (en)

[origin: EP0521419A2] A television receiver has a switched mode power supply (TP29, LP36) for regulating output voltages including the B+ output to a flyback transformer (FBT), by generation of output pulses to a power transformer (LP36). A controller (20) for the power supply is coupled in two feedback loops, one responsive to a pulse width modulator (92) coupled to the flyback transformer and the other comparing the output voltage with an internal reference (in 34) for free running operation. The first feedback loop takes precedence and is active in the run mode of the television receiver. In the standby mode when horizontal rate pulses are absent, the second feedback loop takes over. The second feedback loop has a different reference level than the first, such that when switching from the run mode to the standby mode a transition interval occurs in which no pulses are output by the controller, thereby causing the B+ voltage to the flyback transformer to fall. During this transition interval, horizontal scanning signals continue at falling amplitude, and a signal is input to the kinescope drivers (84), thereby collapsing the picture and draining the ultor voltage on the screen anode (Csc). The reoccurrence of controller pulses when the output voltage of the power transformer (LP36) has fallen to the new lower reference level is used to positively switch operation of the receiver at the conclusion of the transition interval. <IMAGE> <IMAGE> <IMAGE> <IMAGE> <IMAGE> <IMAGE>

IPC 1-7

**H04N 3/185**

IPC 8 full level

**H04N 3/185** (2006.01); **H04N 5/63** (2006.01)

CPC (source: EP KR US)

**H04N 3/185** (2013.01 - EP US); **H04N 5/63** (2013.01 - EP KR US); **H02M 1/0032** (2021.05 - EP US); **Y02B 70/10** (2013.01 - EP US)

Citation (search report)

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- [DXA] "TEA2260 High Performance Driver Circuit for SMPS", APPLICATION NOTES OF SGS-THOMSON MICROELECTRONICS, April 1989 (1989-04-01), GRENOBLE, pages 1 - 34
- [XA] MAIGE: "A universal power supply integrated circuit for tv and monitor applications", IEEE TRANSACTIONS ON CONSUMER ELECTRONICS, vol. 36, no. 1, February 1990 (1990-02-01), NEW YORK US, pages 10 - 17, XP000103534, DOI: doi:10.1109/30.46604

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EP1755335A1; KR100427156B1; DE10016859B4; DE10016859B8; US7375991B2; US6538419B1

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